

DD/S 63-0968

ER. 63-1931

B-115369

March 6, 1963

Equipment & Supplies

Honorable John A. McCone
Director, Central Intelligence Agency

Dear Mr. McCone:

Herewith is a copy of our report to the Congress on our study of the relative financial advantages of purchasing over leasing of electronic data processing equipment in the Federal Government.

The report shows that very substantial financial savings can be realized by the Federal Government if more of its needs for data processing equipment are purchased and if such equipment is more fully utilized. We are recommending to the President of the United States that he establish in his organization a small management office with authority and responsibility to perform the kind of central, coordinated management which we believe is necessary to more fully realize the savings that are possible through more extensive purchasing and more complete utilization of data processing equipment.

The report also contains a general recommendation to the heads of all using departments and agencies that they arrange for a prompt and complete reappraisal of their current plans to lease data processing equipment and take such action as is possible to realize the financial savings that may be available from purchasing such equipment and fully utilizing it.

Sincerely yours,

Comptroller General
of the United States

Enclosure

MORI/CDF Pages 4-7

DD/S Distribution
1 cc - C/ADPS w/ask?
1 cc - DD/S Subject

Orig of letter to DCI for info

Refer to DD/S 63-0968

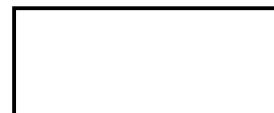
8 Mar 63

RBF:

1. This report proves that substantial savings can accrue to the government at large if EDP equipment is purchased rather than leased, even though such action may not result in savings to the individual Agency. Before anything really comes of this, legislation and Executive action may be needed. The report does recommend that the President establish a small central management office in the White House empowered to coordinate among the several Agencies and decide in individual cases whether it is more prudent to buy or lease.

2. As stated in the transmittal letter, Agencies are urged to reappraise current leases and plans to lease and take action to realize savings that may be available from purchasing and fully utilizing EDP equipment. We may be called upon to do this, presumably, but at the moment the question of savings to the government at large is academic because individual Agencies have no way of making that judgment. The reappraisal must be based upon realistic internal projections in terms of a 5-year base and three-shift utilization with the relative merits of lease vs. purchase evaluated internally. Unless replacement is contemplated within five years, the odds are in favor of substantial savings, even for individual agencies, if the equipment is fully utilized.

3. It is interesting to note that there is no tolerance for ignorance. It is considered as a matter of course that Agencies can project their requirements realistically five years ahead. We have trouble planning one fiscal year ahead, we'd be in one hell of a shape to try for five, especially since we are having so much trouble getting unified control over the equipment we already have. It might be useful to direct Joe Becker to do this, but I doubt if it would be any more fruitful now than it was a year ago when the Comptroller proposed that he buy the 501 and Becker demurred. The background on that is attached and should be interesting for more reasons than one.



RHW

STAT

CIA INTERNAL USE ONLY

Next 4 Page(s) In Document Denied

CIA INTERNAL USE ONLY

100-2435

100-1000

MEMORANDUM FOR: Deputy Director of Central Intelligence

SUBJECT: Purchase of RCA 501 Computer Equipment Now Leased by the Office of the Comptroller

1. This memorandum contains recommendations for the approval of the Deputy Director of Central Intelligence. Such recommendations are set forth in paragraph 6.

2. ANALYSIS

To determine whether the Agency should purchase or continue to lease the RCA 501 computer equipment now in use in the Automatic Data Processing Division, Office of the Comptroller.

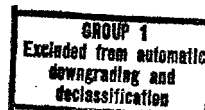
3. FACTS RELEVANT TO THE PROBLEM

a. The RCA 501 computer equipment located in the Automatic Data Processing Division of the Office of the Comptroller was installed in October 1960. Programs have been developed and placed on the equipment since that time to convert nearly all operations of the Division to the computer. The RCA 501 computer is currently being used for processing data for the Office of the Comptroller and the Offices of Logistics, Personnel and Training. This equipment has also been used by the Automatic Data Processing Division to provide data processing services to the Office of Communications, Office of Research and Reports, and the Automatic Data Processing Staff.

b. A comprehensive study was made recently by the management consultant firm [redacted] on the adaptation of the operations of the Automatic Data Processing Division to the RCA 501 computer equipment. In its report, dated 19 February 1962, the management consultant firm stated

STAT

CIA INTERNAL USE ONLY



CIA INTERNAL USE ONLY

SUBJECT

Acquisition of RCA 501 Computer Equipment Now Leased by the Office of the Comptroller

Therefore, the future course of action should be to use the present system to its fullest efficiency and optimize it as much as possible. At the same time, efforts should be directed toward completing an overall systems study which is projected at least five years into the future. This study is the only thing that can indicate whether the present computer facility will be able to operate in an efficient manner within the next few years. The course of action, to summarize, should then be to retain this computer, upon which employees have been trained, until definite deep consideration and deliberation would indicate that it may not be suitable in the future.

2. Bureau of the Budget Circular No. A-56 (TBB A) prescribes Government-wide policies for making determinations as to whether automatic data processing equipment acquired by Government agencies will be leased, purchased, or leased with an option to purchase. This Circular also provides for review of current lease transactions by 30 June 1962 to determine whether it is more advantageous to purchase rather than lease.
3. The lease contract for the RCA 501 computer equipment used by the Automatic Data Processing Division provides the Agency with an option to purchase. In addition the contract provides for certain purchase option allowances related to each monthly rental payment which are available for application toward the purchase cost. The largest of such purchase option allowances apply to monthly rental payments made in the first two years of rental which will end on 30 September 1962.
4. If the Agency elects to exercise its option to purchase the subject RCA 501 computer equipment as of 30 June 1962 for a net cash purchase price [redacted] a total savings [redacted] would accrue for the five year period ending 30 June 1967 (see details on page 1 of TAB B). In addition, for years subsequent to 30 June 1967 annual savings of [redacted] would accrue to the Agency based on present estimated costs of maintenance. These projected savings are based on one-shift use and would be substantially greater because of increased rental costs for use of the equipment in excess of one-shift per day.
5. Assuming a 30 June 1962 purchase date for the RCA 501 computer equipment a break-even point would be reached in June 1967, within three years from the purchase date (see page 1 of TAB B).

STAT

STAT

STAT

CIA INTERNAL USE ONLY

CIA INTERNAL USE ONLY

SECRET

Purchase of RCA 501 Computer Equipment Now Leased by
the Office of the Comptroller

- a. It is anticipated that funds sufficient to cover the cost of purchasing the subject equipment [redacted] can be made available from the 1966 appropriation to permit an obligation to be incurred for such purchase on or before 30 June 1966.

STAT

1. DISCUSSION

- a. The RCA 501 computer system has been successfully and advantageously used since the date of installation, 3 October 1960, and it is a reasonable expectancy that it will continue to be used at least until 1 July 1965, the break-even point described in paragraph 3f above, and probably for many years thereafter. The capabilities of the RCA 501 are believed to be sufficient to satisfy the systems requirements, current and projected, for a period beyond the point in time at which the purchase method begins to provide a cost advantage (1 July 1965). The system is flexible and, by the lease or purchase of additional equipment, can be expanded from its present 32,768 memory locations to 262,144 memory locations. It is not presently conceivable that this will be necessary, but these capabilities are present in the system. The possibility of a requirement for a random access device is recognized; however, if required this could be obtained as a part of a satellite computer which has been ordered to replace peripheral equipment (printer, card transcriber, and card punch) now used in conjunction with the RCA 501 computer without affecting the continued need for the RCA 501 computer.
- b. In a field in which technological advances have been and continue to be made rapidly, the possibility exists that the RCA 501 will be comparatively obsolete before the break-even point is reached. Present requirements indicate, however, that the needs of Automatic Data Processing Division will be satisfied by the present equipment well past the break-even point. If at a later date the decision is made to acquire different equipment, or to discontinue computer operations, the purchased equipment could be sold outright or traded to RCA (see TAB C for statement of RCA Trade-in Allowance Policy); however, it is contemplated that such a decision would not be made before the break-even point set forth in TAB D.
- c. CONCLUSION
- a. The RCA 501 computer equipment has the capabilities of meeting present and expected data processing requirements in the Automatic Data Processing Division of this Office.
- b. It would be to the economic advantage of the Agency to purchase the RCA 501 computer equipment at this time.

CIA INTERNAL USE ONLY

SUBJECT: Purchase of MIA 501 Computer Equipment Now leased by the Office of the Comptroller

G. RECOMMENDATIONS

It is recommended that:

- a. The MIA 501 computer equipment be purchased from the 1966 fiscal year appropriation if sufficient funds are available.
- b. A purchase contract be negotiated with The Radio Corporation of America for the computer equipment outlined in TAB D, page 2 and that such contract include provisions as outlined in paragraphs 7, 10, and 11 of Contract Number DA-005-34053 (see TAB D), and include provision to require RCA to install, in such equipment, at the election of, and cost to the Agency, any technical changes or improvements made to the equipment after the purchase date.
- c. A contract be negotiated with The Radio Corporation of America for maintenance of the purchased equipment, including a provision for annual renewals of such contract on a negotiated basis.



ILLEGIB

Comptroller

Attachments:

TAB A - 4

CONCERN:

*

Chief, Automatic Data Processing Staff

Date

* See memo dtd 2 July 62 for C/ADP's to Comptroller

Deputy Director (Support)

Date

APPROVAL:

Deputy Director of Central Intelligence

Date

Distribution:

Original & 1 - ~~Comptroller~~ Comptroller

1 - ~~Director's Office~~ DD CI

1 - Exec. Registry

1 - ADAL

1 - ~~Compt/ADP~~ Compt/ADP

1 - ~~DD~~ DD

1 - ~~DD~~ DD

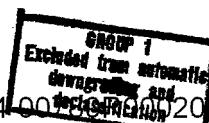
CIA INTERNAL USE ONLY

CIA INTERNAL USE ONLY

A

TAB A

CIA INTERNAL USE ONLY



EXECUTIVE OFFICE OF THE PRESIDENT

BUREAU OF THE BUDGET

WASHINGTON 25, D. C.

October 14, 1961

CIRCULAR NO. A-54

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Policies on selection and acquisition of automatic data processing (ADP) equipment

1. Purpose. This Circular prescribes policies on (a) making selections of equipment to be acquired for use in the automatic data processing (ADP) program of the executive branch, and (b) making determinations as to whether the ADP equipment to be acquired will be leased, purchased, or leased with an option to purchase.

2. Scope. The ADP equipment affected by the policies stated herein includes:

- a. Electronic digital computers, irrespective of use, size, capacity, or price;
- b. All peripheral or auxiliary equipment used in support of electronic computers, whether or not cable-connected and whether selected and acquired with the computer or separately;
- c. Punched-card equipment, whether used in conjunction with or independent of an electronic computer; and
- d. Data transmission or communications equipment that is selected and acquired solely or primarily for use with a configuration of ADP equipment which includes an electronic computer.

Analog computers are covered only when computers of this type are being used as equipment peripheral to a digital computer.

Items of ADP equipment that are (a) physically incorporated in a weapon, or (b) manufactured for the Government under a developmental contract, are not affected by the policies stated herein.

3. Applicability. The policies herein apply to ADP equipment acquired by the Government and to that ADP equipment which is acquired and operated by Government contractors solely to process Government data at Government expense (e.g., Government-owned, contractor-operated facilities). These policies do not apply to ADP equipment acquired by universities and similar institutions with financial assistance through grants-in-aid of Government funds.

(No. A-54)

CIA INTERNAL USE ONLY

CIA INTERNAL USE ONLY

The policy provisions of this Circular become applicable when a determination has been made that the utilization of ADP equipment is essential. It is assumed that such determinations have been preceded by and are based upon the results of well-documented studies which provide an adequate factual basis for concluding (a) that the functions or processes for which the ADP equipment can be used are essential to perform, and (b) that the systems, procedures, and methods to be employed in performing these functions or processes have been designed to achieve the highest practicable degree of effectiveness with optimum efficiency and operational economy. Guidelines for planning and conducting studies preceding a decision to utilize ADP equipment, for the development of system specifications, and for equipment evaluation and selection are contained in Bureau of the Budget Bulletin No. 60-6, "Automatic Data Processing (ADP) Program of the Executive Branch: Studies preceding the acquisition of ADP equipment," dated March 18, 1960.

4. Policies on equipment selection. The selection of ADP equipment includes the initial selection of ADP equipment, the selection of ADP equipment additional to that on hand, the selection of ADP equipment to replace ADP equipment on hand, the modification of equipment on hand, usually for the purpose of increasing memory capacity, computational capability, or speed of input or output, or combinations of the foregoing. In all these circumstances, the following policies apply:

a. The selection of ADP equipment will not be made until system specifications are available to serve as a basis for selection. For purposes of this Circular, the term "system specifications" means (1) the delineation of the objectives which the system is intended to accomplish; (2) the data processing requirements underlying that accomplishment, i.e., a description of the data output and its intended uses, the data input, data files, volumes of data, processing frequencies and timing; and (3) such ADP equipment capabilities as may need to be identified. System specifications will be designed to insure free competition among equipment manufacturers.

b. The officials responsible for making decisions on the selection of ADP equipment will assure that the selection process accords equal opportunity and appropriate consideration to all manufacturers who offer equipment capable of meeting the system specifications. In this connection, the selection process may be facilitated by written invitations to manufacturers to submit proposals as a means for obtaining information regarding the capabilities of ADP equipment to meet the system specifications.

(No. A-54)

CIA INTERNAL USE ONLY

CIA INTERNAL USE ONLY

3

c. Two prime factors will be considered in the selection of equipment: (1) its capability to fulfill the system specifications, and (2) its overall costs, in terms of acquisition, preparation for use, and operation. The term overall costs, as used in this paragraph, will be interpreted to include such cost elements as personnel, purchase price or rentals, maintenance of purchased equipment, site preparation and installation, programming and training. When ADP equipment of two or more manufacturers meets the system specifications, the equipment which represents the least overall cost to the Government will be selected. Factors which do not relate directly or indirectly to the capability of ADP equipment to meet system specifications or overall costs normally will not be included in the considerations unless a conclusive judgment cannot be made on the basis of the two prime factors.

5. Policies on equipment acquisition. Most commercially available ADP equipment can be acquired by purchase or by lease, with or without an option to purchase. The General Services Administration has contracts with principal manufacturers, listed in Federal Supply Schedules (FSS), for the rental of ADP equipment. GSA currently is negotiating contracts for the purchase (including provisions for trade-in allowances) and maintenance of ADP equipment. Until such time as these contracts appear on the Federal Supply Schedule, it will be necessary for departments and agencies to negotiate purchase and maintenance transactions. All ADP equipment acquisition transactions are subject to prevailing policies, laws and regulations governing procurement by Federal Government agencies. In addition, except for equipment that can be acquired by the purchase method only, the following policies are applicable:

a. The method of acquiring ADP equipment will be determined after careful consideration of the relative merits of all methods available (i.e., purchase, lease, or lease-with-option-to-purchase). The method chosen will be that which offers the greatest advantage to the Government under the circumstances which pertain to each situation. In this connection, the following general guidelines will be taken into account:

(1) The purchase method is preferred when all of the following conditions exist:

(a) The system study which preceded the selection of the equipment has established a reasonable expectancy that the ADP equipment under consideration can be successfully and advantageously used.

(No. A-54)

CIA INTERNAL USE ONLY

(b) A comparative cost analysis of the alternative methods of acquisition, of the types illustrated by Attachments A and B, indicates that a cost advantage can be obtained by the purchase method in six years or less after the date of delivery. This analysis usually will include the following cost elements under each method: for the lease method--rental costs, including maintenance; for the purchase method--purchase costs, including purchase price, maintenance, and other one-time costs applicable only to purchase; for the lease-with-option-to-purchase method--rental costs, and purchase costs less credits applicable upon purchase. In addition to the cost elements described above, the residual value of equipment to the Federal Government will be considered as a factor in a comparative cost analysis. Trade-in allowances quoted by manufacturers may be used as a representation of the residual value.

(c) The capabilities of the ADP equipment will continue to be needed and will be sufficient to satisfy the system requirements, current and projected, for a period beyond the point in time at which the purchase method begins to provide a cost advantage. The possibility that future technological advances will render the selected equipment comparatively obsolete before the cost advantage point is reached should not rule out purchase if the selected equipment is expected to be able to satisfy the system requirements.

(2) The lease-with-option-to-purchase method is indicated when it is necessary or advantageous to proceed with the acquisition of the equipment that meets system specifications, but it is desirable to defer temporarily a decision on purchase because circumstances do not fully satisfy the conditions which would indicate purchase. This situation might arise when it is determined that a short period of operational experience is desirable to prove the validity of a system design on which there is no previous experience, or where decisions which might substantially alter the system specifications are imminent.

(3) The lease method, without option to purchase, is indicated only when it is necessary or advantageous to proceed with the acquisition of equipment that meets system specifications and it has been established conclusively that any one of the conditions under which purchase is indicated is not attainable.

b. Negotiations or renegotiations of equipment delivery dates will be conducted in a manner which insures that firm and final commitments by the Government to accept delivery of ADP equipment on a specific date will not be made until it has been determined through a readiness review that the using agency will be prepared to use the equipment productively as soon as it becomes operational.

(No. A-54)

CIA INTERNAL USE ONLY

6. Review of current or pending lease transactions.

a. Lease or lease-with-purchase-option transactions in effect at the time this Circular is issued, and which are expected to remain in effect until fiscal year 1964, will be reviewed in the light of the provisions of paragraph 5. If it is found to be to the advantage of the Government to purchase leased ADP equipment in this category, steps will be taken to make such purchases during the earliest fiscal year in which funds for this purpose are available to the agency. Reviews of current lease transactions should be undertaken as soon as practicable and completed by June 30, 1962.

b. The method of acquisition of ADP equipment selected but not yet accepted for delivery at the time this Circular is issued will be reviewed for adherence to the policies herein stated, and, when indicated, the basis of acquisition will be changed to conform if permitted by the terms of the contract or agreement.

7. Documentation. System studies (sometimes referred to as applications studies, feasibility studies, and by other terms), system specifications, and readiness reviews will be fully documented. Decisions on the selection of ADP equipment, on the method of acquisition, and on the review of the current status of the method of acquisition also will be documented to reflect adequately the considerations taken into account and the basis for the decisions.

8. Administration of policies. The head of each executive department and establishment will establish the necessary framework of procedures, including appropriate reviews and controls, that will assure compliance with the policies herein stated.

By direction of the President:

DAVID E. BELM
Director

Attachments 2

(No. A-54)

CIA INTERNAL USE ONLY

ATTACHMENT A
CIRCULAR NO. A-54

LEASE VS. PURCHASE
REPRESENTATIVE ADP COMPUTER SYSTEM
BASED ON TWO-SHIFT USE

ITEM OF COST	COSTS BY FISCAL YEAR					
	1962*	1963	1964	1965	1966	1967
1. Purchase basis:	\$	\$	\$	\$	\$	\$
a. Purchase costs.	600,000	0	0	0	0	0
b. Maintenance, cumulative.	45,000	90,000	135,000	190,000	245,000	300,000
c. Cumulative, purchase basis.	645,000	690,000	735,000	790,000	845,000	900,000
2. Lease basis, cumulative (including maintenance).	200,000	400,000	600,000	800,000	1,000,000	1,200,000
3. Purchase basis exceeds lease basis.	445,000	290,000	135,000	--	--	--
4. Lease basis exceeds purchase basis.	--	-- x	--	10,000	145,000	300,000

* Year acquired, utilized full year.

(No. A-54)

ATTACHMENT B
CIRCULAR NO. A-54

LEASE VS. LEASE-WITH-
OPTION-TO-PURCHASE
REPRESENTATIVE ADP COMPUTER SYSTEM
BASED ON ONE-SHIFT USE

ITEM OF COST	COSTS BY FISCAL YEAR					
	1962*	1963	1964	1965	1966	1967
1. Lease basis, with-option-to-purchase: (Option exercised at end of first year).	\$	\$	\$	\$	\$	\$
a. Lease.	150,000	--	--	--	--	--
b. Less, credit upon purchase.	-75,000	--	--	--	--	--
c. Purchase costs.	600,000	0	0	0	0	0
d. Maintenance, cumulative.	26,000	52,000	78,000	108,000	138,000	168,000
e. Cumulative, lease/option basis.	701,000	727,000	753,000	783,000	813,000	843,000
2. Lease basis, cumulative (including maintenance).	150,000	300,000	450,000	600,000	750,000	900,000
3. Lease/option exceeds lease basis.	551,000	427,000	303,000	183,000	63,000	--
4. Lease basis exceeds lease/option basis.	--	--	--	--	--	57,000

* Year acquired, utilized full year.

(No. A-54)